## UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN SOUTHERN DIVISION

IN RE: FCA US LLC MONOSTABLE

ELECTRONIC GEARSHIFT LITIGATION	Case Number 16-md-02744 Honorable David M. Lawson
MDL No. 2744	Magistrate Judge David R. Grand
DEDRA MANEOTIS,	
Plaintiff,	Case Number 17-10351 Honorable David M. Lawson
V.	Hollorable David W. Lawson
FCA US, LLC,	
Defendant.	

## OPINION AND ORDER DENYING DEFENDANT'S MOTION TO EXCLUDE TESTIMONY OF PLAINTIFF'S EXPERT CRAIG ROSENBERG

The defendant moved to exclude testimony by the plaintiff's expert witness, Craig Rosenberg, from the trial on the plaintiff's claims for personal injuries. The defendant contends that Rosenberg's testimony must be excluded under Federal Rule of Evidence 702 because he lacks sufficient qualifications to render it, his conclusions are unreliable because the study he conducted did not generate "sufficient applicable data to be empirical," and the study itself is defective because the drivers were not asked to compare the monostable shifter to a then-available alternate design. Those arguments track similar objections to the admission of Rosenberg's testimony, which the defendant raised in a motion to exclude during the class certification phase of the consolidated economic loss cases. The Court denied that motion. There is nothing in the present motion that causes the Court to reach a different result. The present motion to exclude Mr. Rosenberg's testimony at trial will be denied.

I.

The major portion of Rosenberg's report concerns a driving study he carried out, which was intended roughly to mirror the design of a 2012 focus group study commissioned by the defendant and performed by its research firm, Lextant. The Lextant study had compared various models of gear shifters for ease of use and incidence of errors. *See* Expert Report of Craig Rosenberg dated Oct. 22, 2018, ECF No. 558-2, PageID.22815-22939. The abridged specimen of the report submitted in this matter appears identical to a full copy of the same report which was placed into the record and cited in the parties' briefing on the defendant's motion for summary judgment in the economic loss cases. *See* Full Expert Report dated Oct. 22, 2018, ECF No. 619-39.

Rosenberg used two vehicles, which were driven through a series of scripted exercises by 31 drivers recruited from the driving public. One vehicle was a 2015 Jeep Cherokee equipped with the monostable gear shifter, and the other was a 2019 Jeep Cherokee equipped with a successor "polystable lever" gearshift design. The drivers all were fluent in English, ranged in age from 20 to 59, and were experienced motorists who reported driving at least 7,000 miles per year. Full Expert Report, ECF No. 619-39, PageID.28670-71. Rosenberg selected participants to ensure that he had a mix of those both with and without previous experience using monostable type shifters. *Id.* at PageID.28671. The driving exercises were conducted with one participant at a time in an unoccupied parking lot of a closed retail store, during daylight hours, in clear weather conditions. *Id.* at PageID.28675-76. Rosenberg was in the vehicle during the exercises, and he used a GoPro camera to record the driver's activity. *Id.* at PageID.28676. The same 2015 Jeep Grand Cherokee with the monostable shifter was used in all exercises, along with a second "control" vehicle which was a 2019 Grand Cherokee with the polystable lever shifter. That shifter,

although also electronic, appears and functions more like a traditional non-electronic "gated" shifter. *Id.* at PageID.28679-681. Participants performed a series of driving maneuvers and parking exercises first in the class vehicle and then in the control vehicle. *Id.* at PageID.28682-83. They were given 10 minutes to practice the exercises in each vehicle before repeating the same maneuvers for data collection, and then they were asked questions about their impressions of each shifter after the driving exercise was done. *Id.* at PageID.28683.

Rosenberg and an assistant reviewed videos from the in-car camera to catalog and classify eight types of errors they observed, including "undershoot," "overshoot," "wrong gear" (car was in a different gear than the driver believed), "wrong direction" (driver moved the shifter in the wrong direction to reach the intended gear), and "can't tell in correct gear" (vehicle was in the proper gear, but the driver shifted to another gear). *Id.* at PageID.28684-86. Rosenberg concluded that the monostable shifter produced many times more shifting errors in the exercises (416 errors for the monostable design vs. 38 for the polystable). *Id.* at PageID.28696. Rosenberg found that there was no significant difference in error rates among drivers with and without prior experience using a monostable type shifter. *Id.* at PageID.28702.

After the driving exercise was done, Rosenberg presented participants with a list of 22 words in two columns and asked them to pick which best described each shifter. "The top five words selected to describe the Monostable shifter were (1) Awkward, (2) More-work, (3) Frustrating, (4) Confusing, and (5) Difficult," and "[t]he top five words selected to describe the Polystable gear shift were (1) Predictable, (2) Easy, (3) Simple, (4) Clear, and (5) Intuitive." *Id.* at PageID.28715. Rosenberg also noted that both experienced and inexperienced participants rated the monostable shifter equally poorly in terms of usability, intuitiveness, and demand for excess attention to ensure proper gear selection. *Id.* at PageID.28717-18.

Rosenberg concluded based on the results of his study that "the Monostable gear shifter has an unintuitive design, is difficult to operate, and provides inadequate tactile and visual feedback," and "[t]hese flaws associated with the Monostable shifter can lead to safety critical incidents associated with eyes off road time and unintended gear selection that can result in vehicle rollaway events." Id. at PageID.28725. He also reviewed the results of the August 2012 Lextant study, from which his experimental method was derived, concluding that the results of the Lextant study essentially were the same and confirmed an excessively high rate of shifting errors with the monostable shifter, due to its confusing and awkward design. *Id.* at PageID.28734. Rosenberg noted two major safety concerns with the design: (1) "unintended gear selection errors can result in vehicle rollaways that can be dangerous to the driver, passengers, and other nearby people and property, and (2) "the increased attention required to shift gears can reduce attention away from the roadway and result in reduced situational awareness." Id. at PageID.28655. Rosenberg's report also included an extensive discussion of specific human interface elements of the design and various accepted guidelines for control system design which, in his opinion, the gear shifter violated. *Id.* at PageID.28739-28746.

In a supplemental report, Rosenberg expressed further specific conclusions pertinent to this personal injury action, stating that (1) "the design of the Fiat Chrysler Monostable shifter that was installed in the 2014 Jeep Grand Cherokee that [plaintiff Dedra Maneotis] was driving likely resulted in Ms. Maneotis believing that the vehicle was in park when it was actually in some other gear (such as reverse, neutral, or drive)," and (2) "[w]hen Ms. Maneotis exited the vehicle, and the vehicle was not in park as Ms. Maneotis had intended, the vehicle rolled down the driveway and caused damage to property as well as injury to Ms. Maneotis." Supp. Report dated Nov. 8, 2019, ECF No. 558-3, PageID.22930. Rosenberg based those conclusions on his review of the police

report and insurance claim files relating to the plaintiff's rollaway accident, in conjunction with the relevant conclusions expressed in his general report about the safety implications of the monostable gear shifter design.

II.

The Court recently filed an opinion addressing motions to exclude expert testimony from the common issues trial. The law that governed that decision applies here as well, and the Court sets it out for the convenience of the parties.

As a general rule, witnesses may not testify at trial unless they have personal knowledge of the facts about which they testify. Fed. R. Evid. 602. An exception to that rule exists for certain individuals who have special knowledge about a subject that extends beyond the common knowledge of jurors and may be helpful to them to decide a case. *United States v. Rios*, 830 F.3d 403, 413 (6th Cir. 2016). Those individuals — sometimes called "experts" — are allowed to testify in the form of an opinion based on information made known to them by others. Fed. R. Evid. 702, 703. It is useful to repeat the general criteria for the admission of expert testimony and the Court's role as gatekeeper.

Evidence Rule 702, which governs expert testimony generally, was modified in December 2000 to reflect the Supreme Court's emphasis in *Daubert v. Merrell Dow Pharmaceuticals., Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), on the trial court's gatekeeping obligation to conduct a preliminary assessment of relevance and reliability whenever a witness testifies to an opinion based on specialized knowledge. Rule 702 states:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;

- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

The language added by the 2000 amendment — subparagraphs (b) through (d) — restates *Daubert*'s insistence on the requirements that an expert's opinion be based on a foundation grounded in the actual facts of the case, that the opinion is valid according to the discipline that furnished the base of special knowledge, and that the expert appropriately "fits" the facts of the case into the theories and methods he or she espouses. *See Daubert*, 509 U.S. at 591-93.

An expert's opinion is not relevant unless it is based on the actual facts of the case. *Lee v. Smith & Wesson Corp.*, 760 F.3d 523, 529 (6th Cir. 2014) (Keith, J. dissenting) ("The 'relevancy' prong of Rule 702 requires that an expert's theory adequately 'fit' the facts of the case. Expert testimony that does not fit the facts does not relate to an issue in the case and, therefore, is not relevant.") (citing *Daubert*, 509 U.S. at 591). An opinion is "reliable" from an evidentiary standpoint if it is "valid" according to the discipline upon which it is based. *See Daubert*, 509 U.S. at 590. In determining validity, the Court's focus is on principles and methodology, not results.

Even where an expert's opinion does not embrace the specific factual situation at hand, he or she still may be able to offer testimony helpful to the factfinder. The 2000 Amendments to Rule 702 did "not alter the venerable practice of using expert testimony to educate the factfinder on general principles." Fed. R. Evid. 702 Advisory Committee Notes to 2000 Amendments. Rule 702 allows an expert to "testify in the form of an opinion or *otherwise*" (emphasis added), which means that the expert may share his or her special knowledge with the factfinder in areas that might extend beyond the information known to the average person. *See, e.g., Redmond v. United States*, 194 F. Supp. 3d 606, 615 (E.D. Mich. 2016) (stating that an expert's testimony could be helpful to the jury if the information is "beyond the ken of common knowledge") (citing *Berry v. City of* 

Detroit, 25 F.3d 1342, 1350 (6th Cir. 1994)). However, when an expert's testimony does not take the form of an opinion, but rather focuses on "educat[ing] the factfinder on general principles," application of the foundational elements in Rule 702 takes on a different cast. Take First Tennessee Bank National Association v. Barreto, 268 F.3d 319 (6th Cir. 2001), for example. In that case, the expert witness described industry customs dealing with prudent banking practices. The court held that the Daubert factors were not helpful in determining the admissibility of an expert's testimony on whether the plaintiff followed such practices. It reasoned that because the basis of the expert's testimony was his "own practical experiences throughout forty years in the banking industry," his testimony was not the sort that "len[t] [it]sel[f] to scholarly review or to traditional scientific evaluation." Id. at 335.

The defendant's first objection that Rosenberg is unqualified because he lacks expertise in "automobile design" is not well taken. As the Court previously concluded:

The defendant has not presented a convincing argument that Dr. Rosenberg is unqualified to testify about the human factors concerns with the defendant's gear shifter design and their impact on vehicle safety. The defendant's criticism of Rosenberg's lack of experience with "automobile engineering" or "vehicle safety" is not fatal to the admissibility of his testimony, because he is qualified by his extensive general experience in human factors engineering and the design of control systems of various sorts to apply design principles which, based on his extensive experience, are accepted in his field.

In re FCA US LLC Monostable Elec. Gearshift Litig., 382 F. Supp. 3d 687, 700 (E.D. Mich. 2019). "In this case, the principal allegations are that the design of the shifter is confusing and contrary to the way ordinary drivers expect a conventional automobile gear shifter to work, and that the design gives insufficient indications of its status and operation to allow a driver reliably to tell whether the car is in the intended gear. The defendant has not explained how any novel or exotic principles of 'automobile design' are required in order for an expert to evaluate the simple

interfaces presented and determine if they reliably inform the driver whether the control inputs he or she intended have been received by the car." *Ibid*.

The defendant further argues that Rosenberg lacks critical expertise in the inner workings of transmissions and gear shifter "wiring" and "linkages" that are required to illuminate the "benefits" of the defendant's design for the purposes of the "risk-benefit" analysis applied by Colorado courts in product defect cases. Colorado courts have held that "the risk-benefit test, [following the framework suggested by Restatement (Second) of Torts § 402A], is the proper test to use in assessing whether a product . . . is unreasonably dangerous due to a design defect." Walker v. Ford Motor Co., 2017 CO 102, ¶ 14, 406 P.3d 845, 850 (Colo. 2017). The analysis involves the factfinder weighing various factors to determine whether the design chosen was unreasonably unsafe compared with an available and safer alternative. The recognized factors that inform the deliberation are as follows:

- (1) The usefulness and desirability of the product its utility to the user and to the public as a whole.
- (2) The safety aspects of the product the likelihood that it will cause injury and the probable seriousness of the injury.
- (3) The availability of the substitute product which would meet the same need and not be as unsafe.
- (4) The manufacturer's ability to eliminate the unsafe character of the product without impairing its usefulness or making it too expensive to maintain its utility.
- (5) The user's ability to avoid danger by the exercise of care in the use of the product.
- (6) The user's anticipated awareness of the dangers inherent in the product and their avoidability because of general public knowledge of the obvious condition of the product, or of the existence of suitable warnings or instructions.
- (7) The feasibility, on the part of the manufacturer, of spreading the loss by setting the price of the product or carrying liability insurance.

Id. at 2017 CO 102 n.5, 406 P.3d at 850 n.5. Notably, those factors do not include any consideration of "benefits" of the product design for the maker; instead the benefits to be considered are those to the "user" and "the public as a whole." It is not apparent to the Court how inner workings of the mechanism such as "wiring" and "linkages" have any bearing on the utility of the gear shift design for the typical driver or the general public. But even if the Court accepts, for the sake of argument, that Rosenberg lacks some expertise pertinent to the "utility" factor in the analysis, that does not render his opinion any less admissible on the equally germane topic of the "safety aspects of the product," which focuses on "the likelihood that it will cause injury and the probable seriousness of the injury." Rosenberg is sufficiently qualified to opine on that subject, and his testimony will be helpful and informative both to educate the jury about the specific safety concerns posed by the design, and to help them understand how, in a reasoned manner, they may assess its safety relative to any available alternatives.

The defendant's second objection that the driving study methods were unreliable based on various purported statistical deficiencies also misses the mark," because "[a]ll of the specific criticisms of Dr. Rosenberg's experimental design bear on the weight of his conclusions and not the admissibility of his opinion." *In re FCA US LLC Monostable Elec. Gearshift Litig.*, 382 F. Supp. 3d at 701.

The defendant's third objection that the driving study results are irrelevant because the comparison vehicle used a type of gear shift — the "polystable lever" — that was not commercially available when the class vehicles went to market also is unpersuasive as a ground for exclusion. Rosenberg's opinion was supported by a review of more comprehensive materials than just his driving study, which, as noted above, included a review and analysis of results of the 2012 Lextant study that was conducted using similar methods, with substantially identical results. It is

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undisputed that the 2012 study did include a comparator gear shift design that actually was

considered by the defendant for use in the class vehicles, namely a "rotary polystable" pattern that

was the subject of some licensing negotiations between the defendant and Jaguar. The defendant

contends (and separately argued in its motion for summary judgment on the economic loss claims)

that there are factual issues about whether the Jaguar design was "commercially available" for use

in the class vehicles when they first went to market. But no such dispute is before the Court in the

present motion; instead, it is sufficient here to observe that Rosenberg's opinions about the

problems in the shifter's design amply are substantiated by his study comparing it to a more

conventional successor design, and also are supported in a reasoned manner by his comparison

with the features and performance of a contemporary design — the rotary polystable shifter —

which unquestionably did exist when the class vehicles were designed and sold.

III.

The plaintiff's expert is qualified to opine on the control system design and driving safety

topics embraced by his report, and his testimony will be helpful to aid the jury's assessment of

whether the gear shifter at issue was unreasonably unsafe. The defendant has not shown that the

methods by which the opinions were developed are invalid or unreliable.

Accordingly, it is **ORDERED** that the defendant's motion to exclude the testimony of the

plaintiff's expert Craig Rosenberg (ECF No. 558) is **DENIED**.

s/David M. Lawson

DAVID M. LAWSON

United States District Judge

Dated: April 4, 2022

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